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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/718,527	11/24/2003	Taro Fukaya	245820US0TTCRD	1993

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EXAMINER	
SERGENT, RABON A	

ART UNIT	PAPER NUMBER
1796	

NOTIFICATION DATE	DELIVERY MODE
05/14/2009	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No.	Applicant(s)	
	10/718,527	FUKAYA ET AL.	
	Examiner	Art Unit	
	Rabon Sergent	1796	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *09 February 2009*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *15,17,18,20,23,24,26 and 27* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *15,17,18,20,23,24,26 and 27* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

1. Claims 15, 17, 23, 24, 26, and 27 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Adequate support has been provided for the addition of "another decomposing agent", as claimed within claims 15 and 24. It is not seen that there is anything on the record to suggest that further addition of another decomposing agent (as opposed to the same decomposing agent) is supported by the original disclosure. Also, there is no support for adding the additional agent after reaction of the decomposed substance with the epoxy or isocyanate, yet claim 15 specifically recites this sequence.

2. Claims 15, 17, 23, 24, 26, and 27 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Firstly, with respect to claim 15, it is unclear from the claimed sequence of steps when the second addition of decomposing agent actually is to occur. As drafted, the addition step occurs after reaction of the decomposed substance with the epoxy or isocyanate; however, it would seem that this is incorrect. Similarly, with respect to claim 24, it is unclear when the claimed addition is to occur, as it pertains to the process of claim 18.

Secondly, with respect to claims 17 and 23, it is unclear which of the decomposing agents recited within claim 15 is to be further limited by the dependent claims. Furthermore, with respect to claim 17, it is unclear if the limitation of claim 17 requires that the "another

decomposing agent" of claim 15 be one of the claimed anhydrides, but different from the first recited decomposing agent within claim 15.

Thirdly, claim 24 refers to the method of claim 18; however, claim 18 is drawn to a resin. It is noted that claim 27 is also drawn to a method; however, the method is that of claim 24.

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

4. Claims 18, 20, 24, and 27 are rejected under 35 U.S.C. 102(b) as being anticipated by DE 19512778 C1.

The reference discloses the production of isocyanate-reactive polyol dispersions, that may be reacted with polyisocyanates to produce polyurethanes, wherein the polyol dispersions are produced by decomposing waste polyurethane with cyclic anhydrides, such as phthalic anhydride or succinic anhydride, at temperatures of 140°C to 250°C. See abstract and claim 12 of translation. Furthermore, the reference allows for the use of extruders. See third page of translation, third line from the bottom of the page and the paragraph prior to the examples on the third page from the end of the translation. Furthermore, despite applicants' argument, since extruders (or snail machines) are disclosed and since effective reaction within the system would mandate stirring, the position is taken that the reference clearly allows for stirring the reaction mixture. With respect to claims 24 and 27, since claim 18 is drawn to a product, it has not been established that the method steps of these claims yield a patentably distinct product, where the same decomposing agent is used in the additional step.

5. Claims 15, 17, 23, 24, 26, and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over DE 19512778 C1.

As aforementioned, the reference discloses the production of isocyanate-reactive polyol dispersions, that may be reacted with polyisocyanates to produce polyurethanes, wherein the polyol dispersions are produced by decomposing waste polyurethane with cyclic anhydrides, such as phthalic anhydride or succinic anhydride, at temperatures of 140°C to 250°C. See abstract and claim 12 of translation. Furthermore, the reference allows for the use of extruders. See third page of translation, third line from the bottom of the page and the paragraph prior to the examples on the third page from the end of the translation. Furthermore, since extruders (or snail

machines) are disclosed and since effective reaction within the system would mandate stirring, the position is taken that the reference clearly allows for stirring the reaction mixture.

6. The reference fails to disclose the step adding additional decomposing agent to the decomposed substance and further fails to disclose that the decomposing agent is crushed to a size of 1 mm of less prior to use (claim 23). However, with respect to the former difference, since it has been held that the selection of any order of mixing ingredients or adding ingredients is *prima facie* obvious (*Ex parte Rubin*, 128 USPQ 440 (Bd. App. 1959) and *In re Gibson*, 39 F.2d 975, 5 USPQ 230 (CCPA 1930); MPEP 2144.04(IV)(C)) and since one seeking to further decompose the polyurethane would be motivated to further treat it with decomposing agent, the position is taken that it would have been obvious to one of ordinary skill to add additional decomposing agent to the composition for the very purpose of further decomposing the polyurethane. With respect to the latter difference, the position is taken that grinding or comminuting reactants to simplify or ease processing or to increase surface area to promote faster reaction or dissolution was extremely well-known in the chemical arts at the time of invention; therefore, it would have been obvious to reduce the size of the decomposing agent for these reasons.

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after

the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication should be directed to R. Sergent at telephone number (571) 272-1079.

/Rabon Sergent/
Primary Examiner, Art Unit 1796

R. Sergent
May 7, 2008